



Exhibit A

Appendix of Amendments

In the Claims

Please amend claims 1, 14, 15, 32, 34 and 42–44 as shown:

1. (Thrice Amended) [A] An isolated nucleic acid molecule comprising a nucleic acid sequence encoding a (poly)peptide having a function of the human K<sup>+</sup> ion *eag* channel, wherein the nucleic acid sequence is selected from the group consisting of:

(a) a nucleic acid sequence comprising a nucleic acid molecule encoding the polypeptide having the amino acid sequence SEQ ID NO:3 or SEQ ID NO:4;

(b) the nucleic acid sequence SEQ ID NO: 13 or SEQ ID NO:14;

(c) a nucleic acid sequence that hybridizes to the complementary strand of a nucleic acid molecule of (a) or (b) [at] in 4XSSC at 65°C or [at] in 4XSSC at 42°C in 50% formamide; and

(d) a nucleic acid molecule being degenerate to the sequence of the nucleic acid molecule of (c).

14. (Thrice Amended) A composition comprising the nucleic acid molecule of claim 1[, ] or a vector comprising said nucleic acid molecule[, a polypeptide encoded by said nucleic acid molecule, an antibody specifically directed against said polypeptide, or optionally, in further combination with any one of the nucleic acid molecule, the vector, the polypeptide or the antibody], wherein the composition additionally comprises a pharmaceutically acceptable carrier.



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In the Claims

Please amend claims 1, 14, 15, 32, 34 and 42–44 as shown:

1. (Thrice Amended) [A] An isolated nucleic acid molecule comprising a nucleic acid sequence encoding a (poly)peptide having a function of the human K<sup>+</sup> ion *eag* channel, wherein the nucleic acid sequence is selected from the group consisting of:

(a) a nucleic acid sequence comprising a nucleic acid molecule encoding the polypeptide having the amino acid sequence SEQ ID NO:3 or SEQ ID NO:4;

(b) the nucleic acid sequence SEQ ID NO: 13 or SEQ ID NO:14;

(c) a nucleic acid sequence that hybridizes to the complementary strand of a nucleic acid molecule of (a) or (b) [at] in 4XSSC at 65°C or [at] in 4XSSC at 42°C in 50% formamide; and

(d) a nucleic acid molecule being degenerate to the sequence of the nucleic acid molecule of (c).

14. (Thrice Amended) A composition comprising the nucleic acid molecule of claim 1[, ] or a vector comprising said nucleic acid molecule[, a polypeptide encoded by said nucleic acid molecule, an antibody specifically directed against said polypeptide, or optionally, in further combination with any one of the nucleic acid molecule, the vector, the polypeptide or the antibody], wherein the composition additionally comprises a pharmaceutically acceptable carrier.

15. (Thrice Amended) A diagnostic composition for the diagnosis of cancer, comprising the nucleic acid molecule of claim 1[,] or a vector comprising said nucleic acid molecule[, a polypeptide encoded by said nucleic acid molecule or an antibody specifically directed against said polypeptide].

32. (Thrice Amended) A kit comprising the nucleic acid molecule of claim 1[,] or a vector comprising the nucleic acid molecule[, a polypeptide encoded by the nucleic acid molecule or an antibody specifically directed against said polypeptide].

34. (Amended) The kit according to claim 32 comprising the nucleic acid molecule[,] and the vector[, the polypeptide and the antibody].

42. (Amended) A composition comprising the nucleic acid molecule according to any one of claims 35–37[,] or a vector comprising said nucleic acid molecule[, a polypeptide encoded by said nucleic acid molecule, an antibody specifically directed against said polypeptide, or optionally, in further combination with any one of the nucleic acid molecule, the vector, the polypeptide or the antibody], wherein the composition additionally comprises a pharmaceutically acceptable carrier.

43. (Amended) A diagnostic composition comprising the nucleic acid molecule according to any one of claims 35–37[,] or a vector comprising said nucleic acid molecule[, a polypeptide encoded by said nucleic acid molecule or an antibody specifically directed against said polypeptide].

44. (Amended) A kit comprising the nucleic acid molecule according to any one of claims 35–37[,] or a vector comprising the nucleic acid molecule[, a polypeptide encoded by the nucleic acid molecule or an antibody specifically directed against said polypeptide].

15. (Thrice Amended) A diagnostic composition for the diagnosis of cancer, comprising the nucleic acid molecule of claim 1[,] or a vector comprising said nucleic acid molecule[, a polypeptide encoded by said nucleic acid molecule or an antibody specifically directed against said polypeptide].

32. (Thrice Amended) A kit comprising the nucleic acid molecule of claim 1[,] or a vector comprising the nucleic acid molecule[, a polypeptide encoded by the nucleic acid molecule or an antibody specifically directed against said polypeptide].

34. (Amended) The kit according to claim 32 comprising the nucleic acid molecule[,] and the vector[, the polypeptide and the antibody].

42. (Amended) A composition comprising the nucleic acid molecule according to any one of claims 35–37[,] or a vector comprising said nucleic acid molecule[, a polypeptide encoded by said nucleic acid molecule, an antibody specifically directed against said polypeptide, or optionally, in further combination with any one of the nucleic acid molecule, the vector, the polypeptide or the antibody], wherein the composition additionally comprises a pharmaceutically acceptable carrier.

43. (Amended) A diagnostic composition comprising the nucleic acid molecule according to any one of claims 35–37[,] or a vector comprising said nucleic acid molecule[, a polypeptide encoded by said nucleic acid molecule or an antibody specifically directed against said polypeptide].

44. (Amended) A kit comprising the nucleic acid molecule according to any one of claims 35–37[,] or a vector comprising the nucleic acid molecule[, a polypeptide encoded by the nucleic acid molecule or an antibody specifically directed against said polypeptide].